

Financial Performance and Management Structure of Small, Closely Held Banks

John M. Anderlik
Federal Deposit Insurance Corporation

Richard A. Brown
Federal Deposit Insurance Corporation

Kathryn L. Fritzdixon
Federal Deposit Insurance Corporation

September 2015

Abstract

This paper examines the challenges and opportunities specific to closely held banks. It is based on a survey of bank examiners in three FDIC supervisory regions that is used to identify the ownership and management structure of over 1,350 institutions. The survey results suggest that almost 75 percent of community banks in these regions can be regarded as closely held, typically on the basis of family or community ties. Closely held banks may face certain operational challenges in terms of raising external capital and recruiting future managers, especially in rural areas. At the same time, closely held banks may have certain operational advantages, including the ability to focus on long-term goals and to minimize agency problems that may arise from the separation of ownership and operational control. The paper compares the performance of closely and widely held banks as identified in the survey and finds that closely held banks do not appear, on net, to be underperforming widely held banks in recent years. However, the results also point to the possibility that succession management may be a more difficult problem for them to resolve over the long term.

The views expressed in this paper are those of the authors and do not necessarily reflect the views of the Federal Deposit Insurance Corporation. We thank Clayton Boyce, Eric Breitenstein, Richard Cofer, Martin Cooper, Chasity Dschaak, Jessica Kaemingk, James LaPierre, and Rich Speigle for work on the survey and helpful comments and suggestions. Any errors or omissions are our own.

1. Introduction

The literature dealing with community banks emphasizes unique characteristics that distinguish them from other banks.¹ Many of these characteristics can be readily measured or approximated using quarterly Call Report data. For example, community banks are generally smaller in asset size than noncommunity banks. They tend to focus on traditional banking activities, making and holding loans, and funding themselves with core deposits. They hold relatively large amounts of equity capital relative to assets. Many community banks specialize in lending to the agricultural sector, or in making commercial and industrial loans, or loans secured by commercial real estate. Because they do business in a relatively limited geographic area, community banks are able to make operational decisions locally, frequently based on tacit, personal knowledge of their customers and market area, as opposed to relying primarily on models and standardized data. As a result, a central, defining characteristic commonly attributed to community banks is that of relationship lending, as opposed to a more impersonal, transactional banking model. A recent study has incorporated a number of these attributes into a community bank definition that can be applied consistently over the past 31 years.²

Less extensively studied are the organizational characteristics of community banks, including management and ownership structure. Some organizational information is publicly available in Call Reports. For example, as of December 2014, 93.2 percent of FDIC-insured community banks were organized as stock charters, and the remaining 6.8 percent were organized as mutuals.³ Following the passage of the Small Business Job Protection Act of 1996, a large number of stock community banks adopted Subchapter S status, which eliminates the double taxation of earnings for banks with limited ownership.⁴ By year-end 2014, 35 percent of community banks as defined by the FDIC were organized under Subchapter S, compared to just

¹ For example, see Hein, Koch, and MacDonald (2005).

² FDIC (2012).

³ Approximately 2 percent of stock banks are owned by mutual bank holding companies, so that they are, in effect, mutually owned banks.

⁴ Under Subchapter C status, earnings are taxed at the corporate level and again at the shareholder level. Subchapter S eliminates the corporate taxation of earnings, reducing the tax burden to shareholders. There are several conditions—including having 100 or fewer owners—that a firm must meet to receive Subchapter S status. See 26 U.S.C. §1361 for the restrictions on Subchapter S firms.

7 percent of institutions that did not meet the FDIC’s community bank definition.⁵ This broad measure confirms the general understanding that community banks are much more likely than noncommunity banks to be “closely held,” or controlled by an ownership group with relatively few, closely allied members who effectively exercise strategic control over the bank. Subchapter S status, however, is only a rough proxy for being closely held.

Additional information on organizational form is available in confidential supervisory data. A 1995 study by researchers at the Federal Reserve Bank of Kansas City used supervisory data to identify closely held banks as those where supervisory reports indicated that there was a “principal shareholder” who owned more than 10 percent of voting shares.⁶ While the study found that the operational efficiency of independent banks was similar to banks operating as subsidiaries of single- or multi-bank holding companies, it also found evidence that efficient banks tend to have closely held ownership, managers who hold an ownership stake in the bank, or owners who were actively involved in the day-to-day management of the bank. The 10 percent ownership stake is a blunt measure of the ownership structure of a bank. The limited availability of more nuanced data on ownership and related agency issues has impeded research in this area.

This paper builds on the literature about organizational structure using new data from an April 2015 survey of FDIC examiners in three supervisory regions. The examiners answered questions about ownership structure, overlap of ownership and management, and succession. The survey was designed to not only limit the demands placed on participating examiners, but also to eliminate any reporting burden for bankers themselves.

While it was not a representative, random sample of all FDIC-insured banks, the survey provides a fairly detailed look at the organizational attributes of more than 1,350 FDIC-supervised, state-chartered community banks that operate in the FDIC’s Kansas City, Dallas, or Chicago regions and are not members of the Federal Reserve System. The survey allows us to identify closely held banks among these community banks.

The survey results provide an opportunity to update research that was based on supervisory and financial data from the early 1990s. Not only have market conditions and banking practices

⁵ See *FDIC Community Banking Study* (2012) for the FDIC definition of community bank, which presents a functional definition, rather than a fixed-asset-size definition.

⁶ Spong, Sullivan, and DeYoung (1995).

changed since then, but the regulatory landscape has also undergone significant change as well. While the elimination of geographic restrictions contributed to banking industry consolidation during the late 1990s and early 2000s, analysts continue to assess the effects of regulatory reforms that followed the recent financial crisis. These industry changes may have altered the effect that ownership structure has on bank performance. Our results show that in the past five years, closely held community banks have not underperformed widely held community banks.

Section 2 describes the conceptual framework for our evaluation of bank ownership and management structure. Based on the previous literature, our prior expectations are somewhat mixed, with potential advantages and disadvantages to being closely held and to having an overlap between ownership and management. Section 3 describes the survey of FDIC examiners that we conducted. Section 4 explores how differences in organizational structure are related to balance sheet composition, capital formation, strategic decisions, and financial performance. Section 5 concludes.

2. Conceptual Framework

Closely held banks frequently differ from widely held banks in two important dimensions. The first is the degree of concentration of ownership. By definition, ownership is more concentrated in a closely held bank than in a widely held bank. This concentration of ownership may reside within one individual, or may be shared among the members of a tightly affiliated group bound by family or community ties.

Second, concentrated ownership may have implications for the management structure of the bank. Day-to-day operational control of the bank may reside with a manager who is either a member of the ownership group or can otherwise be considered an ownership insider.⁷ Both the concentration of ownership and the degree of overlap between ownership and control present potential advantages and disadvantages in terms of efficiency, and may also influence the propensity of the bank to take risks.

⁷ While it is possible that the manager of a widely held bank can also hold an ownership stake or be considered an insider with respect to ownership, the fact that ownership is not concentrated in a single group limits the degree to which ownership and control can overlap at widely held banks.

Concentrated Ownership. One reason a closely held ownership structure could prove to be an operational advantage is that insider shareholders are likely to have a longer time horizon for decision-making than external shareholders. As a result, the owners of closely held banks may tend to view their stake as a major, long-term investment rather than as one stock in a larger portfolio. As a result, the owners of a closely held bank can be expected to take a longer, more strategic perspective than the owners of a bank that must meet an earnings target every quarter. To the extent that this strategic focus translates into operational decisions that maximize long term profitability, it could enhance the financial performance of the institution over time. This effect might be especially pronounced in the case of family-owned banks, for which the planning horizon could span more than one generation.⁸

A second potential advantage of closely held ownership is the ability of the bank to address the principal-agent problem that can arise between owners and managers. There is an extensive literature describing principal-agent conflicts that can occur when the owner (the principal) of a firm delegates responsibility to the manager (the agent), but the two do not share the same goals.⁹ Divergence between the goals of owners and managers may cause firms to underperform if the manager's choices do not serve to maximize the value of the firm.

Bank owners can solve this problem by monitoring and supervising the manager, but these actions are costly in both time and money. However, in the case of a closely held bank, owners may have a greater incentive to invest in monitoring managers because more of the benefits of monitoring accrue to insider owners, rather than to external shareholders. With increased willingness to invest in monitoring, owners of the closely held bank are better equipped to address principal-agent problems that may arise from the separation of ownership and control.

A bank with a closely held ownership structure may pursue goals other than strict profit maximization. In some cases, these goals may reflect a decision to incur noninterest expenses for the benefit of the owners, managers, or other affiliated stakeholders to the detriment of the bottom line (generally referred to as *expense preference behavior*).¹⁰ Some of the owner's goals

⁸ Anderson and Reeb (2003) show that family owned non-financial businesses outperform non-family owned businesses among a sample of S&P 500 companies.

⁹ For a theoretical discussion of agency problems, see Jensen and Meckling (1976).

¹⁰ See Edwards (1977).

may be consistent with the long-term interests of the bank and the mission of a community bank. For example, bank owners may choose to support credit needs of local businesses during difficult times, or to invest in the local community through sponsorships or community events. In either case, closely held ownership may allow owners to achieve at least some of their financial and strategic goals through means other than maximizing profits in the short run.

A second potential disadvantage to closely held ownership is that it may be more difficult for the bank to raise capital to make investments that improve the profitability of the bank. Banks raise capital using retained earnings or by issuing new ownership shares. Issuing shares to raise capital from new shareholders will dilute the stake of the current owners in the bank, so closely held banks may be less willing to do this. Closely held banks may instead raise new capital from existing owners as “external capital,” and so the amount of capital they can raise may be limited. This could prevent the bank from making a profitable investment, such as expanding or making an acquisition.

The expected effect of a closely held ownership structure on risk taking appears to be less ambiguous. The owners of closely held banks can typically be thought of as having a substantial amount of financial capital tied up in their ownership position. Moreover, to the extent that the factors that bind together an ownership group include family or community ties, the stake of this ownership group may also include considerable social capital. Accordingly, the ownership insiders of closely held banks typically have much to lose if the bank should fail. As a result, they can be expected to prefer a more risk-averse strategy than do shareholders who own smaller stakes in many different banks that they do not control, and with which they are not closely affiliated.¹¹

From a regulatory perspective, the increased risk aversion from a closely held ownership structure is beneficial in that it can be expected to partially offset the incentives for increased risk taking that may arise from deposit insurance and other elements of the regulatory safety net.¹²

¹¹ Spong and Sullivan (2007) show that among community banks, banks with owners whose net worth is concentrated in the bank take on less risk. Barry, Lepetit, and Tarazi (2011) show that concentrated ownership decreases bank risk for European banks.

¹² See, for example, International Association of Deposit Insurers (2015).

Table 1 summarizes the theoretical considerations associated with closely held ownership structure and the operational efficiency and risk taking behaviors of banks.

Table 1
How Closely Held Ownership May Influence
Operational Efficiency and Risk Preferences of Banks

		Theory	Reference
Operational Efficiency	Pro:	Closely held banks may be less beholden to short-term earnings pressures.	Anderson and Reeb (2003) James (1999) Spong, Sullivan, DeYoung (1995)
		Closely held banks may be more likely to monitor managers because owners capture more of the returns of monitoring.	Haye (2009) Kashian, Cummings, Wang (2011) Westort, Kashian, Cummings (2010) DeYoung, Spong, Sullivan (2000)
	Con:	Closely held banks may have more trouble raising capital to make investments.	DeYoung and Li (2015)
		Closely held banks may pursue goals other than profit maximization.	Fama and Jensen (1985) Shleifer and Vishny (1997)
Risk Preferences	Pro:	Owners of closely held banks may be more risk averse, given the concentration of their wealth in the bank.	Barry, Lepetit, and Tarazi (2011) Spong and Sullivan (2007)

Overlap of Ownership and Control. Beyond the effects of ownership structure itself, the degree of overlap between ownership and managerial control can also be an operational advantage or disadvantage for a bank. Because widely held banks, by definition, exhibit a substantial separation between ownership and control, they are inherently subject to inefficiencies arising from principal-agent problems and must implement potentially costly measures to overcome them. In contrast, when the principal owner or an ownership group insider exerts day-to-day managerial control over a bank, the agency problem is minimized. The manager can be expected to act in the interests of the owners because the manager *is* an owner.

The potential downside of significant overlap between ownership and control is the limited size of the talent pool from which qualified managers may be recruited. When individuals with close

family or community ties comprise the ownership group, those ties may also define and limit the pool of managerial candidates. Even if the owners of the closely held bank solve the principal-agent problem by finding a qualified manager in the ownership group, the bank may face the problem once again when that manager retires and the owners must find a qualified successor. Additionally, if the retiring manager wants to sell a substantial stake in the bank, the bank must also find a new owner as well as a new manager.¹³

As in the case of the concentration of ownership, the general expectation is that community banks with overlap between ownership and management will tend to be more risk-averse than banks where ownership and management are separated.¹⁴ The basis for this expectation is that the owners of closely held banks tend to be risk-averse because they hold a substantial portion of their net worth in the bank.¹⁵ Managers of closely held banks in which ownership and management overlap are likely to act in accordance with the risk preferences of the owners. In cases where closely held banks are operated by hired managers, it is possible that the managers could have a shorter time horizon than the owners, and therefore would have an incentive to pursue the short-term rewards of a risky strategy without sharing the concerns of owners about the long-term consequences.¹⁶

Table 2 summarizes the theoretical considerations we have discussed with respect to the overlap of ownership and control and the operational efficiency and risk-taking behavior of banks.

¹³ Banks without a clear succession plan may be forced to sell at a low price, or be subject to takeover pressures. See Reid (2009) and Marshall (1998). Closely held banks, in particular, must plan to transfer control and ownership. See Specht and Hershberger (2009).

¹⁴ For large banks, the expectation is that the owners will be more risk-tolerant than managers because the shareholders may have diversified portfolios and their ownership stake in the bank may represent only a small portion of their net worth. See, for example, Saunders, Strock, and Travlos (1990) and Demsetz, Saidenberg, and Strahan (1997). We expect that this may not be the case for many community banks.

¹⁵ Sullivan and Spong (2007) find that, in a sample of state-chartered banks from the Tenth Federal Reserve District, owner-managers hold 86 percent of their net worth in the bank.

¹⁶ It should be pointed out that the literature also raises the possibility that hired managers of widely held companies may become entrenched over time, and therefore may prove to be more risk-averse than unaffiliated shareholders might like them to be. See Gorton and Rosen (1995).

Table 2
How Overlap of Ownership and Control May Influence
Operational Efficiency and Risk Preferences of Banks

		Theory	Reference
Operational Efficiency	Pro:	The incentives of owner-managers are aligned with the interests of other shareholders to maximize long-term bank value.	Jensen and Meckling (1976) Glassman and Rhoades (1980) Hannan and Mavinga (1980) Spong, Sullivan, and DeYoung (1995) James (1999) Ang, Cole, and Lin (2000) Anderson and Reeb (2003)
	Con:	Succession planning may be more difficult because the bank faces a limited talent pool. Succession involves transferring both control and ownership, often at the same time.	Singell and Thornton (1997) Reid (2009)
Risk Preferences	Pro:	Overlap of ownership and control may cause the bank to take on less risk in some areas, depending on the concentration of the owner's wealth in the bank.	Sullivan and Spong (1998) Sullivan and Spong (2007)

There are many considerations that govern the relationship between ownership structure, efficiency, and risk-taking. Theoretically, closely held ownership could be an advantage or disadvantage in efficiency. In risk-taking, we expect that managers of closely held banks will, on average, take on less risk than managers of widely held banks. We can address these questions empirically by identifying closely held banks and studying their recent performance.

3. Results of the FDIC Examiner Survey

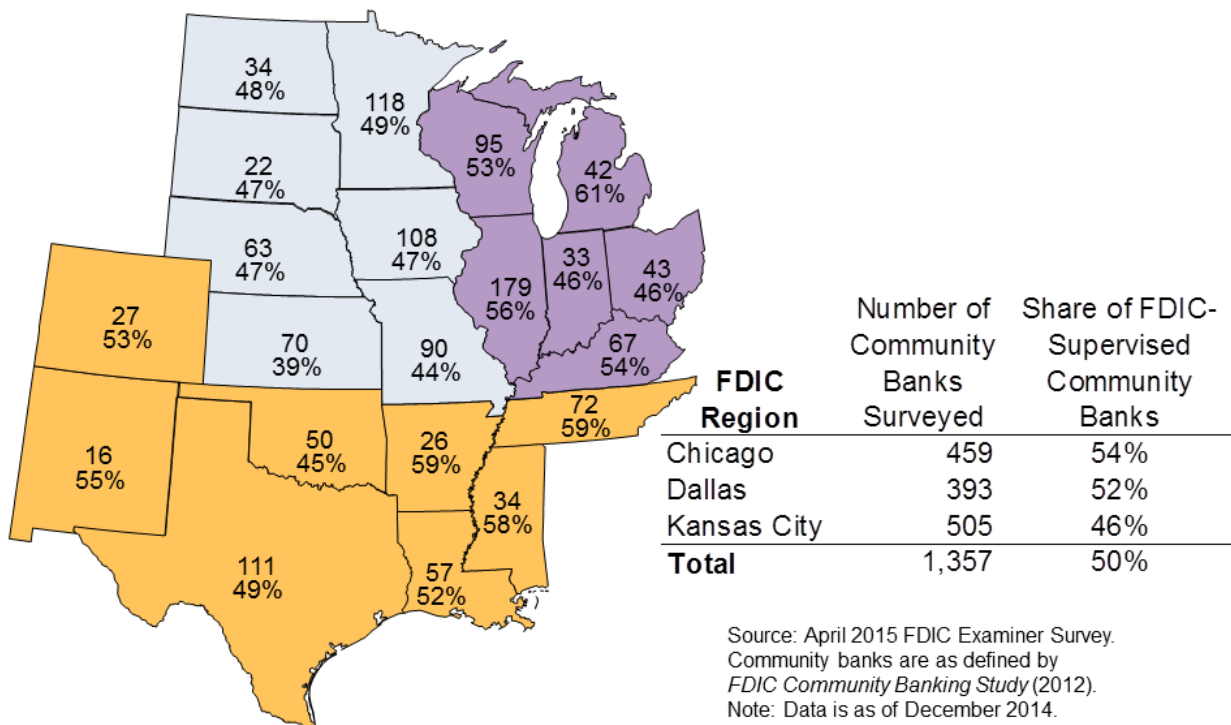
A lack of publicly available data has limited the ability to study how ownership structure and managerial control affect efficiency and risk-taking at community banks. Most literature on bank ownership focuses on large banks that are required to file public disclosures on actively traded stocks. The existing literature on closely held community banks comes mostly from the regulatory community and is largely based on confidential supervisory data. Even so, the

supervisory data describing the ownership stake of the “principal shareholder” and the connection between ownership and management provides a somewhat incomplete picture of these attributes.

This study avoided some of these limitations by conducting a survey of FDIC bank examiners in the Chicago, Dallas, and Kansas City supervisory regions, which encompass 21 states (see map below). Responses were obtained for every bank that had been examined in 2014 and first quarter 2015. The survey responses include over 1,400 FDIC-supervised banks, which represent about 50 percent of all FDIC-supervised banks in these regions. For each bank, the examiners answered a series of simple questions about the structure of bank ownership, the overlap between ownership and management, and how the bank was positioned for management succession.

The complete survey and summary statistics are presented in Appendix A. Ninety-seven percent of banks covered by the survey are community banks according to the definition established in the 2012 *FDIC Community Banking Study*. We limit our analysis to these community banks.

Surveyed Banks Represent About Half of all FDIC-Supervised Community Banks in the Chicago, Dallas, and Kansas City FDIC Regions



The banks in the survey do not constitute a representative random sample of FDIC-insured community banks nationwide, or of community banks in these three regions. The sample is limited to FDIC-supervised institutions that were examined during 2014 or the first three months of 2015.¹⁷ The survey is also a snapshot of bank ownership structure in 2014, rather than a study of long-term trends. The results presented below represent only the banks in the survey, not U.S. community banks as a whole.

Nonetheless, survey responses cover half of the FDIC-supervised community banks in the three regions, and 34 percent of all FDIC-insured community banks. Therefore, the limitations of this sampling approach should be weighed against the large size of the resulting sample within these regions, the ability to directly access the recent experience of FDIC examiners with these institutions, and the absence of requiring bank owners or managers to respond to survey questions.

Table 3
Closely Held Banks Make Up Three-Quarters
of FDIC-Supervised Community Banks in Three Regions

Region	Survey Responses	Identifiable Primary Owner	Closely Held
Chicago	459	288	63%
Kansas City	505	424	84%
Dallas	393	301	77%
Total	1,357	1,013	75%

Source: April 2015 FDIC Examiner Survey.

Survey Question 1: In your judgment, is there an identifiable primary owner or ownership group for this bank? The primary owner or ownership group of the bank is a person or group with a substantial ownership stake that individually or collectively exerts a deciding influence over the governance of the institution.

The survey results show that among FDIC-supervised community banks in the three regions, closely held banks are the norm rather than the exception. Examiners characterized 75 percent of community banks in the survey as having an identifiable primary owner, defined as “a person or group with a substantial ownership stake that individually or collectively exerts a deciding influence over the governance of the institution.” The vast majority of these closely held banks

¹⁷ The FDIC is the primary federal supervisor for state-chartered banks that are not members of the Federal Reserve System (95 percent of community bank sample). It also supervises state savings banks (4 percent of sample) and state stock savings and loans (1 percent of sample).

are controlled by groups with family or community ties. In almost all of the closely held community banks, members of the primary ownership group sit on the board of directors.

Table 4
Most Closely Held Community Banks Are Built Around Family or Community Ties

Region	Survey Responses Indicating Closely Held Bank	Ownership Group Has Family Ties	Ownership Group Has Ties to Community	Members of Ownership Group Sit on Board
Chicago	288	84%	84%	94%
Kansas City	424	90%	83%	96%
Dallas	301	77%	89%	94%
Total	1,013	85%	85%	95%

Source: April 2015 FDIC Examiner Survey.

In a majority of closely held community banks, there is significant overlap between the primary ownership group and the *key officer*, who is defined as the person “who effectively runs the bank on a day-to-day basis, regardless of his/her title.” In 48 percent of closely held community banks, the key officer can be considered a member of the primary ownership group. In an additional 10 percent of closely held banks, the key officer can be considered an ownership group insider, even though he or she is not a primary owner. Taken together, these results imply that in just under 60 percent of FDIC-supervised community banks surveyed, overlap between ownership and management helped to limit the potential for principal-agent problems that could impair operational efficiency.

Succession planning is widely regarded as an important operational concern for both closely and widely held community banks, and the survey included questions about management succession.¹⁸ Among the closely held banks, 50 percent have already identified a potential successor for the key officer, compared to 46 percent of widely held banks. In addition, 62 percent of the closely held banks were deemed to be “well-positioned to recruit qualified

¹⁸ See Stewart (2013) for a discussion of the importance of succession planning, especially following the financial crisis.

management talent from outside the bank,” compared to 69 percent of widely held banks. Overall, the survey results indicate not only that succession planning represents a significant challenge for community banks, but that this challenge also appears to apply to some degree to both closely held and widely held institutions.

Table 5
Ownership and Control Overlap at Most Closely Held Community Banks

Region	Survey Responses Indicating Closely Held Bank	Key Officer Is Also A Member of the Primary Ownership Group	Key Officer Is Not A Member of Primary Ownership Group, But Can Be Considered An Insider	Total: Key Officer Closely Affiliated With Ownership Group
Chicago	288	44%	7%	51%
Kansas City	424	51%	6%	57%
Dallas	301	45%	17%	62%
Total	1,013	48%	10%	58%

Source: April 2015 FDIC Examiner Survey.

Table 6
Management Succession Is An Issue for Closely Held and Widely Held Community Banks

Region	Survey Responses	Bank Has Identified A Viable Successor	Bank Is Well-Positioned To Recruit Qualified Management From Outside
Chicago	288	41%	56%
Kansas City	424	57%	67%
Dallas	301	50%	62%
Total Closely Held	1,013	50%	62%
Total Widely Held	344	46%	69%

Source: April 2015 FDIC Examiner Survey.

4. Characteristics, Financial Performance, and Capital Formation

Merging the survey data with financial data from bank Call Reports and branch office data from the Summary of Deposits permits further analysis of the characteristics of surveyed banks and the effects of ownership structure and managerial control on bank activities, performance, and risk taking.

Characteristics of Closely Held Banks. As discussed at the outset, we hold certain expectations on how closely held banks might compare to widely held banks in our survey, and these expectations are generally met. Overall, closely held banks tend to be smaller, more rural and agricultural, and have charters older than those of widely held banks (see Table 6). Closely held banks had average total assets of \$264 million at year-end 2014, compared to \$334 million for widely held banks.

Closely held community banks are somewhat more concentrated in non-metro areas than widely held banks. While about half of both closely and widely held banks were headquartered in metropolitan counties, 36 percent of closely held community banks were headquartered in rural counties, compared to 21 percent of widely held institutions.

Not only are closely held banks more likely to be headquartered in rural counties, but they are also more likely to be headquartered in depopulating counties. In the 30 years between 1980 and 2010, half of all rural counties and 30 percent of all micropolitan counties in the United States lost population, compared to only 12 percent of metropolitan counties. Banks headquartered in depopulating areas face challenges of declining customer bases and, in some instances, difficulty in attracting qualified management.¹⁹ Twenty-four percent of our closely held community banks surveyed were headquartered in depopulating rural counties, compared with only 10 percent of widely held banks.

¹⁹ Anderlik and Cofer (2014).

Table 7
Characteristics of Closely Held and Widely Held Banks

Characteristic	Closely Held Banks	Widely Held Banks
Assets		
Average Asset Size	\$264 million	\$334 million
Average Equity Capital as Percent of Assets	10.7%	11.0%
Geography		
Headquartered in Metropolitan County ¹	46%	57%
Headquartered in Micropolitan County	18%	22%
Headquartered in Rural County	36%	21%
Headquartered in Depopulating Rural County ²	24%	10%
Lending Specialty		
Agricultural Lending Specialty ³	25%	13%
Commercial and Industrial Lending Specialty	2%	2%
Commercial Real Estate Lending Specialty	20%	23%
Mortgage Lending Specialty	7%	18%
Multiple Lending Specialties	12%	19%
No Lending Specialty (Diversified)	32%	24%
Other Consumer Lending Specialty	1%	1%
Age		
Charter Younger than 15 years	7%	24%
Charter Older than 100 years	43%	38%
Market Power		
Operating in 'Highly Concentrated' Deposit Market ⁴	34%	29%

Source: April 2015 FDIC Examiner Survey.

Notes: All figures are as of December 2014.

1. This study follows the designations established by the U.S. Office of Management and Budget for each of the 3,221 U.S. counties and county equivalents as either metropolitan (1,236 counties that are economically linked to one of the 388 U.S. Metropolitan Statistical Areas), micropolitan (646 counties centered on an urban core with a population of between 10,000 and 50,000 people), or rural (counties not located in metropolitan or micropolitan areas).
2. "Depopulating rural counties" refers to counties that lost population between the 1980 census and 2010 census. See Anderlik and Cofer (2014).
3. Community bank lending specialty groups as defined by Chapter 5 of the *FDIC Community Banking Study* (2012).
4. "Highly Concentrated" deposit market defined as a market with a Herfindahl-Hirschman Index value of more than 2,500 points.

Closely held community banks in the survey were also nearly twice as likely as widely held banks to specialize in agricultural lending or to have no lending specialty.²⁰ These characteristics are consistent with the higher propensity of closely held banks to be headquartered in rural counties. By contrast, the widely held community banks in the survey, which were more heavily concentrated in metropolitan or micropolitan counties, were more likely to specialize in mortgage lending or multiple lending areas. The closely held community banks in the survey tended to have charters older than those of widely held banks. Both types of institutions have a substantial proportion of charters that are over 100 years old—43 percent for closely held community banks and 38 percent for widely held community banks. But widely held banks are more than three times more likely (24 percent) than closely held banks (7 percent) to have a charter less than 15 years old.

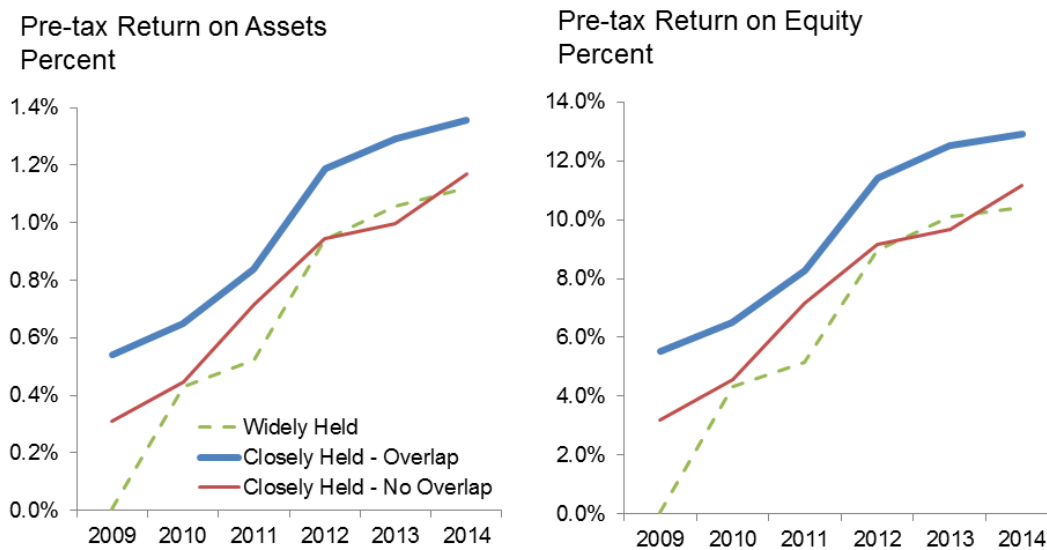
Comparative Financial Performance. In Section 2, we discussed the implications of ownership structure and the overlap between ownership and managerial control for operational efficiency and risk taking. Based on this discussion, our prior expectations are mixed as to how the performance of closely held banks should compare to that of widely held banks, and are also mixed as to the performance implications of overlapping ownership and control among closely held banks. To capture these differences, we break our sample of banks into three groups: closely held banks where the key officer is also a member of the primary ownership group; closely held banks where the manager is an outsider; and widely held banks, where by definition there is no primary ownership group.

A simple comparison of the recent financial performance of these three groups (Chart 1) shows that the closely held banks in our survey have consistently outperformed widely held banks on the basis of both pre-tax return on assets (ROA) and return on equity (ROE) over the six years. Over this period, the average pre-tax ROA of closely held banks in our survey with overlap between ownership and management was on average 21 basis points higher than that of closely held banks with no overlap, and on average 30 basis points higher than that of widely held community banks. While these gaps appear to have narrowed over the past three years, they were still more than 20 basis points in 2014. Moreover, despite the fact that closely held banks in the survey reported similar average levels of equity to assets to widely held banks as of year-end

²⁰ The lending specialty definitions are from Chapter 5 of the *FDIC Community Banking Study* (2012).

2014, closely held community banks with overlap between ownership and management reported ROEs over a full percentage point higher than closely held banks with no overlap and two percentage points higher than widely held community banks in each of the past six years.

Chart 1: Closely Held Community Banks Where Ownership and Managerial Control Overlap Have Consistently Reported Higher Profitability



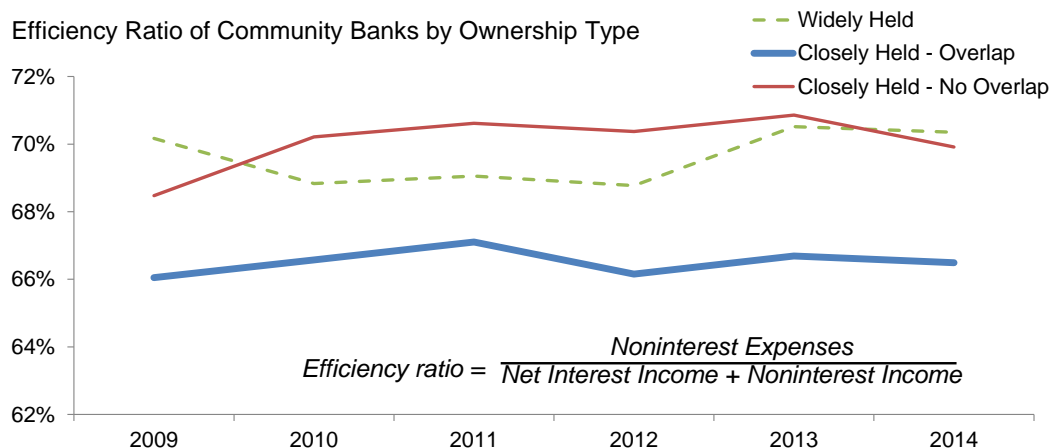
Source: FDIC analysis of Call Report data on 1,357 FDIC-supervised community banks headquartered in the FDIC Kansas City, Dallas, and Chicago regions that were identified in the April 2015 FDIC Examiner Survey as having an ownership structure that could be characterized as closely held or widely held.

Another comparison that focuses more squarely on operational efficiency involves the *efficiency ratio*, or the ratio of noninterest expenses to net operating revenue. This measure represents the expense incurred by the bank to generate one dollar of revenue. A lower efficiency ratio is a positive indicator, reflecting a cost structure more favorable than that of a bank with a higher efficiency ratio. Similar to the profitability comparisons, over the most recent six-year period, closely held community banks in our survey that have overlap between ownership and management consistently reported efficiency ratios lower than those of closely held banks that have no overlap and lower than those of widely held banks. The gaps between the efficiency ratios of these three groups has widened somewhat in recent years (Chart 2).

Table 8 breaks down the components of efficiency in which closely held and widely held banks have differed since 2009. Closely held banks reported higher salary expense as a percent of

average assets in each year, though the gap compared to widely held banks has narrowed substantially in recent years. This salary expense disadvantage for closely held banks was more than made up for by a higher level of noninterest income and a lower cost of funds.

Chart 2: Closely Held Community Banks Where Ownership and Operational Control Overlap Have Consistently Reported Lower Efficiency Ratios



Source: FDIC Analysis of Call Report data on 1,357 FDIC-supervised community banks headquartered in the FDIC Kansas City, Dallas, and Chicago Regions that were identified in April 2015 FDIC Examiner Survey by closely held or widely held ownership structure.

	2009	2010	2011	2012	2013	2014
Salaries Expense						
Closely Held Banks	1.54	1.54	1.57	1.62	1.63	1.64
Widely Held Banks	1.39	1.41	1.49	1.59	1.61	1.60
Noninterest Income						
Closely Held Banks	0.91	0.81	0.81	0.95	0.93	0.93
Widely Held Banks	0.72	0.73	0.74	0.94	0.88	0.78
Cost of Interest-Bearing Liabilities						
Closely Held Banks	1.82	1.35	1.00	0.73	0.55	0.46
Widely Held Banks	2.06	1.51	1.14	0.83	0.62	0.51
Yield on Earning Assets						
Closely Held Banks	5.66	5.28	4.93	4.56	4.28	4.22
Widely Held Banks	5.53	5.15	4.90	4.56	4.28	4.19

Source: FDIC Call Reports of Banks in April 2015 FDIC Examiner Survey.

One possible explanation for the overall difference in performance is that closely held banks tend to be located in small communities, where they may enjoy significant market power. To explore this possibility, we derived two measures of market power and used them to compare closely held banks and widely held banks from the survey. The first measure is the share of total deposits held by the bank within the counties in which it operates. Based on this measure, no meaningful differences can be found between closely held banks and widely held banks in our survey. Second, we calculated the Herfindahl-Hirschman Index of concentration for the counties in which the bank operates as a measure of the competitiveness of its relevant market area. While closely held banks are slightly more likely than widely held banks to operate in a “highly concentrated” market, where they could enjoy market power, the difference is not large (34 percent versus 29 percent). Based on these observations, it does not appear that market power can explain the differences in profitability and efficiency between closely held banks and widely held banks.

Because closely held banks and widely held banks differ on many characteristics, we also perform multiple regression analysis to determine the relative contribution of the different characteristics to financial performance. Appendix B presents the results of the regressions. Specifications (1) and (2) present the results for pre-tax ROA and pre-tax ROE. After controlling for the other differences between the banks, we find that being closely held does not have a statistically significant effect on financial performance. However, having overlap between owner and manager does have a significant, positive effect upon financial performance. This provides evidence that some of the benefit of a closely held organizational structure is the opportunity to resolve principal-agent problems by aligning the interests of managers with the interests of owners.

Risk Taking. Theory suggests that we should expect closely held banks to carry less risk on balance sheets and carry more equity capital than their widely held peers. Owners of closely held banks may have a lower tolerance for risk because they want to be able to pass the business down to future generations. They may also have close ties to their communities and want the bank to continue to be a source of strength in the community. Widely held banks may take on higher levels of risk because managers may be looking to boost short-term profits at the expense of longer-term goals.

By several different measures, closely held community banks appear to report lower levels of balance-sheet risk than do widely held institutions, but the differences do not seem to be as large as expected. First, closely held community banks consistently report a lower level of total loans to total assets (loans-to-assets, or LTA), a general measure of balance-sheet risk. Over the six-year period, the gap was about 3.5 percentage points, and was 4.1 percentage points at year-end 2014 (64.2 percent for closely held banks compared to 68.3 percent for widely held). But when looking at all assets based on their risk-weighting, the gap narrows significantly. At year-end 2014, closely held community banks reported risk-weighted assets to total assets of 70.2 percent, just 1.1 percentage points lower than widely held institutions.

Previous studies have documented the high credit losses from commercial real estate (CRE) loans and construction and development (C&D) loans during and after severe recessions and real estate downturns, including the recent financial crisis.²¹ Using concentrations in these loan types as a proxy for asset risk, we see that both closely held and widely held community banks hold substantial portfolios of CRE loans, but closely held banks consistently report lower levels of such loans. At year-end 2014, closely held banks held 24.9 percent of their assets in CRE loans, compared to 29.5 percent of total assets for widely held institutions. Both types of institutions held about 4.7 percent of their total assets in C&D loans at year-end 2014. Overall, closely held banks and widely held community banks appear to have similar levels of balance sheet risk.

Both closely held and widely held community banks report strong average capital levels, and the differences between the groups is very small over the period studied. At year-end 2014, widely held community banks reported an average leverage ratio of 10.44 percent, just slightly higher than 10.29 percent reported by closely held banks. The difference between the two types of institutions was even smaller when looking at total capital to risk-weighted assets. Overall, closely held banks appear slightly less risky than widely held banks, but the difference is not significant.

Appendix B includes regressions on bank risk-taking behavior. After controlling for the other differences between banks, neither being closely held nor overlap of ownership and management seem to have a significant effect on bank risk taking.

²¹ See FDIC (2012), Chapter 5.

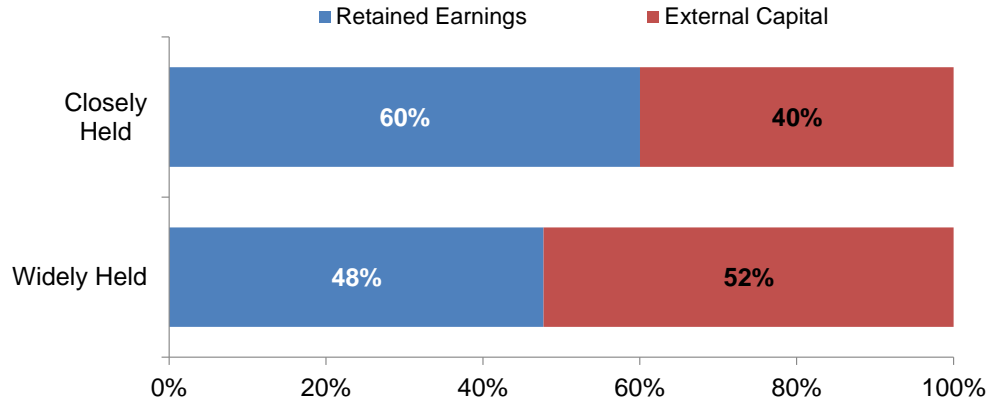
Capital Formation. One potential concern about the closely held organizational structure is whether it limits the bank's access to external sources of capital, thereby limiting its ability to respond to adverse shocks or pursue strategic opportunities. While both closely held and widely held community banks hold strong levels of capital on average, it is important to understand how both types of institutions tend to raise new capital. As expected, the closely held banks in our sample have tended to rely more heavily on retained earnings to increase equity capital and to raise external capital less frequently than do widely held banks (Chart 3). Between 2009 and 2014, the closely held banks obtained 60 percent of gross additions to capital via retained earnings, compared to just 48 percent for the widely held community banks.

Moreover, we find that the widely held community banks in our sample raised capital from external sources somewhat more often than closely held banks over the study period.²² In all but one of the six years studied, widely held community banks raised external capital more frequently than closely held banks, and the gap was widest in 2014 (Chart 4). It is important to note here that external capital may also include capital from existing owners or insiders and, for community banks, is more likely to take place through a private placement than through a market offering. On balance, while the closely held banks in our sample relied more heavily on retained earnings to increase their capital, and also raised external capital less frequently than widely held banks, there is little evidence that closely held community banks were at a decided disadvantage in terms of access to external capital.

²² Our time period includes three years in which the federal government recapitalized banks through the Troubled Asset Relief Program (TARP) and the Small Business Lending Fund (SBLF). These programs were more heavily used by widely held banks than by closely held banks. TARP was used in 2009 and 2010, and in those years, 34 percent of widely held banks in our sample that raised capital and 22 percent of closely held banks in our sample that raised capital received TARP funds. In 2011, the year the SBLF disbursed funds, 30 percent of widely held banks in our sample that raised capital received SBLF funds, compared to 24 percent for closely held banks in our sample that raised capital.

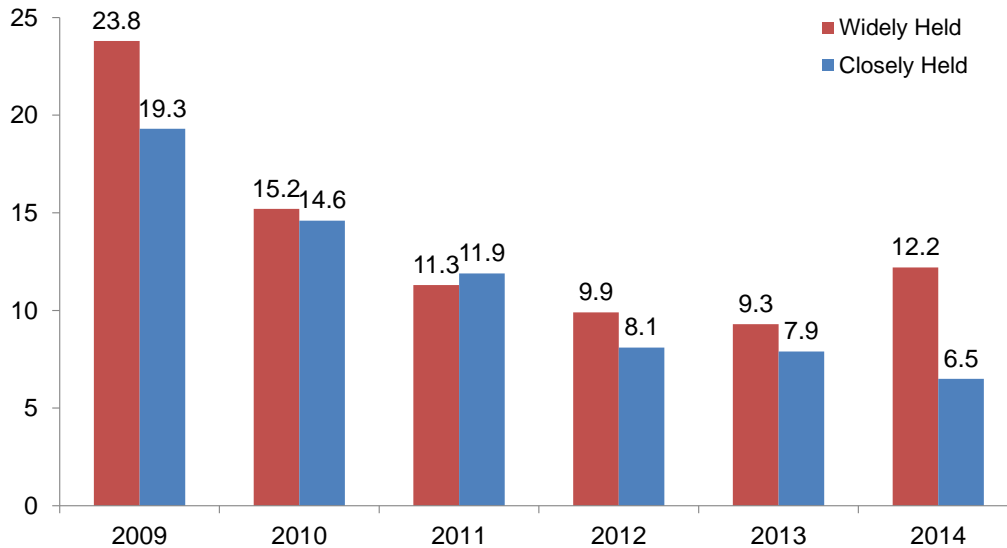
Chart 3: Closely Held Community Banks Rely More on Retained Earnings as a Source of Capital

Percent Gross Capital Raised by Source, 2009 to 2014



Source: FDIC Call Report data on 1,357 FDIC-supervised community banks headquartered in the FDIC Kansas City, Dallas, and Chicago regions identified in April 2015 FDIC Examiner Survey as closely held or widely held. Note: Excludes institutions in first year of existence.

Chart 4: Percent of Existing Community Banks Raising External Capital, by Ownership Type



Source: FDIC Call Report data on 1,357 FDIC-supervised community banks headquartered in the FDIC Kansas City, Dallas, and Chicago regions identified in April 2015 FDIC Examiner Survey as closely held or widely held. Note: Excludes institutions in first year of existence.

5. Conclusion

Community banks have been defined in a number of studies as being generally small institutions that rely on core deposit funding and operate as relationship lenders within a limited geographic area. Less attention has been paid in the literature to the ownership structure of community banks and how it relates to day-to-day operational control and to long-term management succession. This paper addresses the relative lack of data describing these attributes by introducing new survey data collected from FDIC examiners on community banks headquartered in 21 states in the central regions of the United States. We find that three-quarters of FDIC-supervised community banks in these regions are defined by a “closely held” organizational form, where a primary ownership group exerts a deciding influence over the governance of the institution. The vast majority of these closely held institutions are owned by groups that share family or community ties, and a majority of them also exhibit a substantial overlap between the ownership group and the “key officer” who effectively runs the bank. Both closely held and widely held community banks in the survey appear to face significant challenges when it comes to management succession, with only half of closely held banks reportedly having identified a successor to the key officer at the time of the survey.

Economic theory suggests that the closely held organizational form may offer potential advantages and disadvantages for community bank performance. Managers of closely held banks may benefit from being able to make decisions according to a longer time horizon than widely held banks, and their owners may be able to capture more of the returns than can be earned by monitoring bank managers. However, closely held community banks may choose to pursue goals other than strict profit maximization, and may have limited access to external capital. And while closely held banks may be able to resolve agency conflicts with managers by recruiting managers from within the ranks of ownership, this solution constrains the size of the talent pool from which to recruit management. Even when a closely held bank successfully aligns the long-term interests of owners and managers, it must do so all over again as it searches for qualified successors to its current management team.

Comparisons of financial performance and efficiency indicate that closely held community banks in our sample have consistently outperformed widely held community banks in recent years. The highest performance has been found among closely held community banks where there is

substantial overlap between ownership and management, where the potential for agency conflicts is minimized. Higher salary expenses among the closely held banks during this period were more than offset by higher noninterest income, higher asset yields, and a lower cost of funds. While closely held banks in our sample relied more on retained earnings to raise capital than did widely held banks, and raised external capital less frequently, there is little evidence that closely held community banks were at a decided disadvantage to widely held banks in terms of access to external capital.

These favorable comparisons between closely held and widely held community banks suggest that the closely held organizational form is by no means an impediment to performance, and may well be one of the keys to their success. Closely held community banks in which ownership and management largely overlap appear to exhibit advantages over other community banks even after accounting for other factors that affect performance. Nonetheless, this recipe for success—relying on managers who are insiders to the ownership group—may prove difficult for these institutions to replicate going forward as they address the issue of management succession.

References

- Anderlik, John, and Richard Cofer. 2014. Long-Term Trends in Rural Depopulation and Their Implications for Community Banks. *FDIC Quarterly* 8, no. 2:44-59.
- Anderson, Ronald, and David Reeb. 2003. Founding-Family Ownership and Firm Performance: Evidence from the S&P 500. *Journal of Finance* 58, no. 3:1301-1328.
- Ang, James, Rebel Cole, and James Wuh Lin. 2000. Agency Costs and Ownership Structure. *Journal of Finance* 55, no. 1:81-106.
- Barry, Thierno A., Laetitia Lepetit, and Amine Tarazi. 2011. Ownership Structure and Risk in Publicly Held and Privately Owned Banks. *Journal of Banking and Finance* no. 35:1327-1340.
- Demsetz, Rebecca, Marc Saidenberg, and Philip Strahan. 1997. Agency Problems and Risk Taking at Banks. Staff Report no. 29. Federal Reserve Bank of New York.
- DeYoung, Robert, and Lei Li. 2015. *Publicly Traded Versus Privately Held Commercial Banks: Capital Access, Growth, and Financial Performance*. Unpublished paper.
- DeYoung, Robert, Kenneth Spong, and Richard Sullivan. 2001. Who's Minding the Store? Motivating and Monitoring Hired Managers at Small, Closely Held Commercial Banks. *Journal of Banking and Finance* 25, no. 7:1209-1243.
- Edwards, Franklin R. 1977. Managerial Objectives in Regulated Industries: Expense-Preference Behavior in Banking. *Journal of Political Economy* 85, no. 1:147-161.
- Fama, Eugene, and Michael Jensen. 1985. Organizational Forms and Investment Decisions. *Journal of Financial Economics* no. 14:101-119.
- Federal Deposit Insurance Corporation (FDIC). 2012. *FDIC Community Banking Study*. FDIC.
- Glassman, Cynthia, and Stephen Rhoades. 1980. Owner vs. Manager Control Effect on Bank Performance. *Review of Economics and Statistics* no. 62:263-270.
- Gorton, Gary, and Richard Rosen. 1995. Corporate Control, Portfolio Choice, and the Decline of Banking. *Journal of Finance* 50, no. 5:1377-1420.
- Hannan, Timothy and Ferdinand Mavinga. 1980. Expense Preference and Managerial Control: The Case of the Banking Firm. *The Bell Journal of Economics* 11, no. 2:671-682.
- Haye, Eric. 2009. Board Composition, Ownership Structure, Geographic Regulation, and Bank Holding Company Expenses. *Journal of Business and Economics Research* 7, no. 11:19-28.
- Hein, Scott, Timothy Koch, and Scott MacDonald. 2005. On the Uniqueness of Community Banks. *Federal Reserve Bank of Atlanta Economic Review* First Quarter:15-36.

International Association of Deposit Insurers. 2013. Enhanced Guidance for Effective Deposit Insurance Systems: Mitigating Moral Hazard.

http://www.iadi.org/docs/IADI_Mitigating_Moral_Hazard_Enhanced_Guidance_2013-05.pdf

James, Harvey (1999). Owner as Manager, Extended Horizons, and the Family Firm. *International Journal of the Economics of Business* 6, no. 1:41-55.

Jensen, Michael and William Meckling. 1976. Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. *Journal of Financial Economics* 3, no. 4:305-360.

Kashian, Russ, Richard Cummings, and Yannan Wang. 2011. Estimating and Analyzing the Cost Efficiency of Subchapter S Banks. *Journal of Business and Economic Research* 9, no. 7:43-51.

Marshall, Jeffrey 1998. Nothing Succeeds Like Succession. *U.S. Banker* 108.5 (May 1998): 120.

Reid, Bill. 2009. Who's next? *Independent Banker* 59, no. 3:112-114.

Saunders, Anthony, Elizabeth Strock, and Nickolas Travlos 1990. Ownership Structure, Deregulation, and Bank Risk Taking. *Journal of Finance* 45, no.2:643-654.

Shleifer, Andrei and Robert Vishny. 1997. A Survey of Corporate Governance. *Journal of Finance* 62, no. 2:737-873.

Singell, Larry and James Thornton. 1997. Nepotism, Discrimination, and the Persistence of Utility-Maximizing, Owner-Operated Firms. *Southern Economic Journal* 63, no. 4:904-919.

Specht, Dave, and Tom Hershberger 2009. Take Time Now to Develop Your Successors. *Northwestern Financial Review* 194 no. 19:6, 20.

Spong, Kenneth, Richard Sullivan, and Robert DeYoung. 1995. What Makes a Bank Efficient? – A Look at Financial Characteristics and Bank Management and Ownership Structure. *Financial Industry Perspectives* December:1-19.

Stewart, Jackie. Community Banks Are Falling Behind in Succession Planning. *American Banker*, March 26, 2013.

Sullivan, Richard and Kenneth Spong. 1998. How Does Ownership Structure and Manager Wealth Influence Risk? A Look at Ownership Structure, Manager Wealth, and Risk in Commercial Banks. *Financial Industry Perspectives* December:15-40.

Sullivan, Richard and Kenneth Spong. 2007. Manager Wealth Concentration, Ownership Structure, and Risk in Commercial Banks. *Journal of Financial Intermediation* no. 16:229-248.

Westort, Peter, Russ Kashian, and Richard Cummings. 2010. Does Ownership Form in Community Banking Affect Profitability? *Managerial Finance* 36, no. 2:122-133.

Appendix A: FDIC Examiner Survey

Survey Methodology. The FDIC’s risk-management examiners have extensive, up-to-date knowledge of the performance, condition, and governance of FDIC-supervised banks. To better understand the ownership and management structure of closely held community banks, the FDIC accessed this supervisory knowledge by administering an 11-question survey to risk-management examiners in the FDIC’s Chicago, Dallas, and Kansas City Regions. Collectively, 69 percent of FDIC-insured community banks were headquartered in these three regions at year-end 2014.

FDIC management in the Kansas City Regional Office developed the survey questions to capture the most relevant aspects of ownership structure, managerial control, and succession planning at surveyed institutions. Risk-management examiners then completed the survey during April 2015 for all FDIC-supervised banks that had been examined in 2014 and first quarter 2015 in the three regions. Although the examiners answered questions for all banks, we limit the main analysis to only community banks as defined in the *FDIC Community Banking Study* (2012).

The survey results do not constitute a representative random sample of all FDIC-insured community banks nationwide, or of community banks in these three regions. By necessity, they are limited to FDIC-supervised institutions, and include only banks examined during the 15-month period. While these selection criteria help to ensure that the survey results incorporate up-to-date examiner knowledge, they may also introduce some degree of bias to the sample. For example, because banks with less than \$500 million in assets and satisfactory exam ratings are examined every 18 months, while larger or lower-rated institutions are examined more frequently, the survey is likely to under-represent smaller and more highly rated institutions.²³ Still, the large number and share of community banks surveyed in these three regions is expected to mitigate sample bias to a significant extent.

²³ One potential implication of this is the possibility that our results understate the performance of closely held banks. Our results show that banks with assets under \$500 million are more likely to be closely held than banks with assets above \$500 million (75.4 percent compared to 63.9 percent). See Federal Register Vol. 72 (185) pp. 54347-54349 for a discussion of the extended exam cycle rules.

Survey Questions and Responses

A. Ownership Structure

Definition. The *primary owner* or ownership group of the bank is defined as a person or group with a substantial ownership stake that individually or collectively exerts a deciding influence over the governance of the institution.

1. *In your judgment, is there an identifiable primary owner or ownership group for this bank? (If 'No', choose 'NA' for questions 2, 3, and 4.)*

Response	Number
Yes	1,058
No	369
N/A or No Response	0
Total	1,427

2. *If 'Yes' on Question 1 above, does this primary ownership group largely consist of individuals with family ties?*

Response	Number
Yes	889
No	169
N/A or No Response	369
Total	1,427

3. *If 'Yes' on Question 1 above, do the members of this primary ownership group reside in or have other ties to the community in which this bank primarily operates?*

Response	Number
Yes	892
No	166
N/A or No Response	369
Total	1,427

B. Operational Control

Definition. The *key officer* of the bank is defined as the person who effectively runs the bank on a day-to-day basis, regardless of his/her formal title.

4. *If 'Yes' on Question 1 above, do members of this primary ownership group sit on the bank's board of directors?*

Response	Number
Yes	998
No	60
N/A or No Response	369
Total	1,427

5. *Does the key officer of the bank also serve on the board?*

Response	Number
Yes	1,398
No	29
N/A or No Response	0
Total	1,427

6. *Does the key officer serve as the Chairman of the Board?*

Response	Number
Yes	431
No	996
N/A or No Response	0
Total	1,427

7. *Is the key officer also the primary owner or a member of the primary ownership group? (If 'Yes', choose 'NA' for Question 8.)*

Response	Number
Yes	506
No	921
N/A or No Response	0
Total	1,427

8. *If 'No' on Question 7 above, in your judgment, can the key officer still be considered an insider with respect to the primary ownership group?*

Response	Number
Yes	153
No	768
N/A or No Response	506
Total	1,427

C. Management Succession

9. *Has the bank identified a viable successor to the key officer? (If 'No', then choose 'NA' for Question 10.)*

Response	Number
Yes	709
No	718
N/A or No Response	0
Total	1,427

10. *If 'Yes' on Question 9 above, is the identified successor currently affiliated with or employed by the bank?*

Response	Number
Yes	695
No	14
N/A or No Response	718
Total	1,427

11. *In your judgment, is the bank well-positioned to recruit qualified management talent from the outside?*

Response	Number
Yes	923
No	504
N/A or No Response	0
Total	1,427

Appendix B: Regression Analysis of Operational Performance and Risk Taking

Closely and widely held banks differ in terms of several characteristics that affect financial performance. To ensure that the comparisons in the main paper are not simply based on these other characteristics, we perform multiple regression analysis of financial performance on whether a bank is closely held, whether it has overlap of ownership and control, and a number of controls. Regression analysis allows us to control for the differences between banks when comparing financial performance or risk taking, so that we compare only closely and widely held banks that are otherwise similar.

Our regressions take the form of:

$$Performance_{it} = \beta_0 + \beta_1 CloselyHeld_i + \beta_2 Overlap_i + \beta_3 Age_{it} + \beta_4 Assets_{it} + \beta_5 Metro_i + \beta_6 BusinessLine_{it} + \beta_7 MarketPower + \gamma State + \delta Year + \varepsilon_{it}$$

where $Performance_{it}$ is one of several financial performance measures; $CloselyHeld$ is an indicator variable equal to one if the bank is closely held; $Overlap$ is an indicator variable equal to one if there is overlap between ownership and management; Age is the age of the bank; $Assets$ is the size of the bank measured in total assets; $Metro$ is a set of indicators for whether the bank is headquartered in a county in a metropolitan statistical area, micropolitan statistical area, or rural area; $BusinessLine$ is a set of indicators for the bank's business line; $MarketPower$ is a measure of the bank's market power. The panel regressions also include state and year indicators. Standard errors are clustered at the state level.

The results of the regressions are presented in Table B.1 on page 33. Each column represents an individual regression on a performance or risk measure. The data used are from the December Call Report for each surveyed bank for the years 2010 through 2014. Column 5 on risk-weighted assets to total assets includes only observations from 2014, because the risk weightings changed in 2014.

The results show that closely held banks, on average, have not underperformed widely held banks, even when controlling for other bank characteristics that affect profitability. The first two columns show results for two measures of financial performance: pre-tax return on assets and return on equity. In both regressions, the coefficient on being closely held is small and

insignificant. Once we control for the other differences between closely and widely held banks, there does not appear to be a difference in their financial performance. Column 3, Column 4, and Column 5 show the results for measures of risk taking: loan to assets, loans to risk-based capital, and risk-weighted assets to total assets. For the last measure, we use only the December 2014 observations because the risk-weighting measures were changed in 2014. Again, the coefficients on being closely held are small and insignificant.

We also include a dummy variable for whether a bank has overlap between ownership and control in the regression. The coefficients on the overlap between ownership and management are positive and statistically significant for the two measures of financial performance. This suggests that having an owner serve as day-to-day manager of the bank is an effective way to mitigate the principal-agent problem in closely held banks. For the three measures of bank risk, the coefficients on overlap between ownership and control are small and insignificant.

Table B1
Regression Analysis Shows Closely Held Banks
Do Not Underperform Widely Held Banks

Specification	Independent Variable				
	Pre-tax Return on Assets	Pre-tax Return on Equity	Loans to Assets	Loans to Risk Based Capital	Risk Weighted Assets to Total Assets
	1	2	3	4	5
Outcome average	0.084	6.31	0.62	6.02	0.66
Closely Held = 1	-0.0234 (0.0690)	0.164 (0.5280)	-0.00986 (0.0060)	0.068 (0.1290)	-0.00147 (0.0069)
Overlap = 1	0.117** (0.0427)	1.327*** (0.4590)	0.00696 (0.0084)	0.0639 (0.1660)	0.00445 (0.0062)
Age	0.000125 (0.0011)	0.0105 (0.0117)	-0.000336*** (0.0001)	-0.00415** (0.0017)	-0.000378*** (0.0001)
Total Assets (\$ million)	0.314*** (0.0401)	3.298*** (0.5010)	0.0185** (0.0074)	0.371** (0.1380)	0.0354*** (0.0061)
Metro HQ	-0.260*** (0.0518)	-2.422*** (0.3460)	0.0210** (0.0095)	0.366*** (0.0885)	0.0157 (0.0098)
Micro HQ	0.00821 (0.0767)	0.202 (0.7260)	0.0149* (0.0086)	0.312** (0.1240)	0.0154** (0.0068)
Market Power	0.0000516** (0.0000)	0.000450** (0.0002)	-1.61E-06 (0.0000)	-3.37E-05 (0.0000)	-0.00000053 (0.0000)
Ag Specialization	0.409*** (0.1190)	4.476*** (1.5120)	-0.0190* (0.0106)	-0.0493 (0.1760)	-0.00734 (0.0117)
C&I Specialization	0.172 (0.1970)	2.662 (1.9980)	0.011 (0.0164)	0.575* (0.3160)	-0.0212 (0.0223)
CRE Specialization	-0.046 (0.1030)	0.653 (1.1490)	-0.00586 (0.0078)	0.126 (0.2480)	-0.113*** (0.0129)
Mortgage Specialization	0.200* (0.1110)	2.668* (1.4560)	0.0205* (0.0100)	0.427* (0.2050)	0.0068 (0.0084)
Multi-Specialty	0.082 (0.0917)	1.102 (1.1200)	-0.194*** (0.0119)	-1.679*** (0.2230)	-0.179*** (0.0108)
No specialty	1.039*** (0.3270)	6.517*** (2.0550)	-0.0132 (0.0360)	-0.681 (0.4460)	0.0412 (0.0276)
State Fixed Effects	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	No
Observations	6,784	6,784	6,784	6,784	1,357
Adjusted R-squared	0.131	0.101	0.455	0.152	0.485

Source: FDIC Call Reports and April 2015 FDIC Examiner Survey.

Notes: This table presents regressions for bank performance and risk on whether the bank is closely held, whether there is overlap in management and ownership and a set of controls. Column (5) includes only observations from 2014. Standard errors, clustered at the state level, are in parentheses below the coefficients. * p<0.10 ** p<0.05 *** p<0.01.